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| 09/843,495 | 04/25/2001 | Ezhilan Narasimhan | SUN-P6114-MEG | 9277 |

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| EXAMINER |
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JACOBS, LASHONDA T

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| ART UNIT | PAPER NUMBER |
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2157

DATE MAILED: 05/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|---------------------------------------|--|--|
| Office Action Summary | Application No. 09/843,495 | Applicant(s) NARASIMHAN ET AL. | |
| | Examiner LaShonda T. Jacobs | Art Unit 2157 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

This is a Final Office Action in response to Applicants' Amendment/Request for Reconsideration filed on February 24, 2006. Claims 20-24 have been cancelled. Claims 1, 2, 6, 8-15 and 18 have been amended. Claims 1-19 are presented for further examination.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 and 10-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al (hereinafter, "Wang", U.S. Pat. No. 6,598,036) in view of Hardy et al (hereinafter "Hardy", U.S. Pat. No. 4,648,044).

As per claim 1, Wang discloses a method of generating a function, method comprising:

- displaying a field on a client computer for receiving a rule that is to be input into the client computer by a user of the client computer (col. 3, lines 29-41);
- then receiving by the client computer a rule that was input into the client computer by the user of the client computer (col. 3, lines 7-20 and lines 29-41);
- then transmitting the rule from the client computer to a server (col. 3, lines 42-52);
- then storing the rule on the server (col. 3, lines 7-14);

- then receiving a parameter that was entered into the client computer by the user of the client computer (col. 3, lines 7-20 and lines 29-41);
- then transmitting the parameter from the client computer to the server (col. 3, lines 7-14 and lines 42-52); and
- then transmitting the first value to the client computer if the premise is true, otherwise transmitting the second value to the client computer (col. 3, lines 29-41);

However, Wang does not explicitly disclose:

- the rule defining a premise and a conclusion to be drawn from the premise;
- then generating a function by the server that determines if the premise is true and, based at least in part upon the conclusion, outputting a first value if the premise is true and outputting a second value if the premise is false; and
- then executing the function at the server thereby determining, by the server, if the premise is true or if the premise is false.

Hardy discloses a tool for building a knowledge system including:

- the rule defining a premise and a conclusion to be drawn from the premise (col. 10, lines 12-20 and col. 21, lines 17-41);
- then generating a function by the server that determines if the premise is true and, based at least in part upon the conclusion, outputting a first value if the premise is true and outputting a second value if the premise is false (col. 11, lines 40-67); and
- then executing the function at the server thereby determining, by the server, if the premise is true or if the premise is false (col. 11, lines 40-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wang by incorporating a function to determine if a premise is true based on the conclusion thereby providing a useful knowledge engineering tool for building an expert system and running a consultation on a personal-type microcomputer that is easily mastered by people with little computer experience and also provides advance capabilities for the experienced knowledge engineer.

As per claim 2, Wang discloses:

- wherein the act of receiving the rule includes receiving the rule by a browser running on the client computer (col. 2, lines 57-64).

As per claim 3, Wang discloses the invention substantially as claims discussed above.

However, Wang does not explicitly disclose:

- wherein receiving the rule includes receiving a Java equation.

Hardy discloses a tool for building a knowledge system including:

- wherein receiving the rule includes receiving a Java equation (col. 10, lines 12-20 and col. 21, lines 17-41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wang by incorporating a function to determine if a premise is true based on the conclusion thereby providing a useful knowledge engineering tool for building an expert system and running a consultation on a personal-type microcomputer that is easily mastered by people with little computer experience and also provides advance capabilities for the experienced knowledge engineer.

As per claim 5, Wang discloses the invention substantially as claims discussed above.

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However, Wang does not explicitly disclose:

- wherein the act of receiving the rule includes receiving a Basic equation (col. 17, lines 13-20).

Hardy discloses a tool for building a knowledge system including:

- wherein the act of receiving the rule includes receiving a Basic equation (col. 10, lines 12-20 and col. 21, lines 17-41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wang by incorporating a function to determine if a premise is true based on the conclusion thereby providing a useful knowledge engineering tool for building an expert system and running a consultation on a personal-type microcomputer that is easily mastered by people with little computer experience and also provides advance capabilities for the experienced knowledge engineer.

As per claim 6, Wang discloses the invention substantially as claims discussed above.

However, Wang does not explicitly disclose:

- wherein the act of receiving the rule includes receiving a Virtual Basic equation (col. 17, lines 13-20).

Hardy discloses a tool for building a knowledge system including:

- wherein the act of receiving the rule includes receiving a Virtual Basic equation (col. 17, lines 13-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wang by incorporating a function to determine if a premise is true based on the conclusion thereby providing a useful knowledge engineering tool for building an

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expert system and running a consultation on a personal-type microcomputer that is easily mastered by people with little computer experience and also provides advance capabilities for the experienced knowledge engineer.

As per claim 7, Wang discloses:

- wherein the act of transmitting the rule to the server includes transmitting the rule over the Internet (col. 3, lines 7-14 and lines 42-52).

As per claim 8, Wang discloses the invention substantially as claims discussed above.

However, Wang does not explicitly disclose:

- wherein the act of generating the function includes generating a Java function (col. 17, lines 13-20).

Hardy discloses a tool for building a knowledge system including:

- wherein the act of generating the function includes generating a Java function (col. 17, lines 13-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wang by incorporating a function to determine if a premise is true based on the conclusion thereby providing a useful knowledge engineering tool for building an expert system and running a consultation on a personal-type microcomputer that is easily mastered by people with little computer experience and also provides advance capabilities for the experienced knowledge engineer.

As per claim 10, Wang discloses the invention substantially as claims discussed above.

However, Wang does not explicitly disclose:

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- wherein the act of generating the function includes generating a Basic function (col. 17, lines 13-20).

Hardy discloses a tool for building a knowledge system including:

- wherein the act of generating the function includes generating a Basic function (col. 17, lines 13-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wang by incorporating a function to determine if a premise is true based on the conclusion thereby providing a useful knowledge engineering tool for building an expert system and running a consultation on a personal-type microcomputer that is easily mastered by people with little computer experience and also provides advance capabilities for the experienced knowledge engineer.

As per claim 11, Wang discloses the invention substantially as claims discussed above.

However, Wang does not explicitly disclose:

- verifying that the function is valid (col. 11, lines 34-46).

Hardy discloses a tool for building a knowledge system including:

- verifying that the function is valid (col. 11, lines 34-46).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wang by incorporating a function to determine if a premise is true based on the conclusion thereby providing a useful knowledge engineering tool for building an expert system and running a consultation on a personal-type microcomputer that is easily mastered by people with little computer experience and also provides advance capabilities for the experienced knowledge engineer.

As per claim **12**, Wang discloses the invention substantially as claims discussed above.

However, Wang does not explicitly disclose:

- wherein the act of verifying that the function is valid includes running the subroutine through a syntax checker (col. 4, lines 18-22 and col. 11, lines 34-46).

Hardy discloses a tool for building a knowledge system including:

- wherein the act of verifying that the function is valid includes running the subroutine through a syntax checker (col. 4, lines 18-22 and col. 11, lines 34-46).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wang by incorporating a function to determine if a premise is true based on the conclusion thereby providing a useful knowledge engineering tool for building an expert system and running a consultation on a personal-type microcomputer that is easily mastered by people with little computer experience and also provides advance capabilities for the experienced knowledge engineer.

As per claim **13**, Wang discloses the invention substantially as claims discussed above.

However, Wang does not explicitly disclose:

- wherein the act of verifying that the subroutine is valid includes compiling the function and determining if the function compiled without generating an error (col. 11, lines 34-46).

Hardy discloses a tool for building a knowledge system including:

- wherein the act of verifying that the subroutine is valid includes compiling the function and determining if the function compiled without generating an error (col. 10, lines 12-20 and col. 21, lines 17-41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wang by incorporating a function to determine if a premise is true based on the conclusion thereby providing a useful knowledge engineering tool for building an expert system and running a consultation on a personal-type microcomputer that is easily mastered by people with little computer experience and also provides advance capabilities for the experienced knowledge engineer.

As per claim 14, Wang discloses the invention substantially as claims discussed above.

However, Wang does not explicitly disclose:

- wherein the act of verifying that the subroutine is valid includes compiling the subroutine, determining if compiling the function generated an error, and if compiling the function generated an error, then displaying a screen on the computer that allows editing of the rule (col. 11, lines 34-46).

Hardy discloses a tool for building a knowledge system including:

- wherein the act of verifying that the subroutine is valid includes compiling the subroutine, determining if compiling the function generated an error, and if compiling the function generated an error, then displaying a screen on the computer that allows editing of the rule (col. 11, lines 34-46).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wang by incorporating a function to determine if a premise is true based on the conclusion thereby providing a useful knowledge engineering tool for building an expert system and running a consultation on a personal-type microcomputer that is easily

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mastered by people with little computer experience and also provides advance capabilities for the experienced knowledge engineer.

As per claim **15**, Wang further discloses:

- displaying either the first value or the second value on the client computer (col. 3, lines 29-41).

As per claim **16**, Wang discloses:

- wherein the act of receiving the parameter includes receiving the parameter by a browser (col. 2, lines 57-64).
- As per claim **17**, Wang discloses:
- wherein the act of transmitting the parameter to the server includes transmitting the parameter over the Internet (col. 3, lines 7-14 and lines 42-52).

As per claim **18**, Wang discloses the invention substantially as claims discussed above.

However, Wang does not explicitly disclose discloses:

- wherein the method further includes executing the function (col. 11, lines 40-67).

Hardy discloses a tool for building a knowledge system including:

- wherein the method further includes executing the function (col. 11, lines 40-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wang by incorporating a function to determine if a premise is true based on the conclusion thereby providing a useful knowledge engineering tool for building an expert system and running a consultation on a personal-type microcomputer that is easily mastered by people with little computer experience and also provides advance capabilities for the experienced knowledge engineer.

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As per claim 19, Wang discloses:

- wherein the act of transmitting the first value includes transmitting the first value over the Internet (col. 3, lines 7-14 and lines 42-52).

3. Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of Hardy and in further view of de Judicibus (U.S. Pat. No. 6,651,054).

As per claim 4, Wang in view of Hardy discloses the invention substantially as claims discussed above.

However, Wang in view of Hardy does not explicitly disclose:

- wherein the act of receiving a rule includes receiving a PL/SQL equation.

de Judicibus discloses a method, system and program for merging query search results comprising:

- wherein the act of receiving a rule includes receiving a PL/SQL equation (col. 8, lines 59-67).

Given the teaching of de Judicibus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wang in view of Hardy to include a PL/SQL function to submit rules on a computer to allow a user to receive a result set in a timely and efficient manner.

As per claim 9, Wang in view of Hardy discloses the invention substantially as claims discussed above:

However, Wang in view of Hardy does not explicitly disclose:

- wherein the act of generating the function includes generating a PL/SQL function.

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de Judicibus discloses a method, system and program for merging query search results comprising:

- wherein the act of generating the function includes generating a PL/SQL function (col. 8, lines 59-67).

Given the teaching of de Judicibus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wang in view of Hardy to include a PL/SQL function to submit rules on a computer to allow a user to receive a result set in a timely and efficient manner.

Response to Arguments

The Office Notes the following arguments:

- a. Hardy et al nor Wang et al discloses a client computer displaying a field on the client computer for receiving a rule that is to be input into the client computer by a user of the client computer.
- b. Hardy et al nor Wang et al disclose generating a function if the premise of claim 1 is true.

In response to:

(a)-(b) Applicants asserted that neither Hardy nor Wang disclose the claimed "receiving by the client....", "then transmitting the rule from the client to a server"; and "generating a function by the server.....". The examiner disagrees with the present assertion; and there is no evidence that shows what or how specific teachings of the references would or could be combined to achieve the purported objective. The examiner has carefully considered the subject matter as

argued the applicants, the rejections advanced by the examiner, and the evidence of obviousness relied upon by examiner as support for the rejections. In rejecting the claims under 35 U.S.C. 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. The examiner's position with respect to the assertion above is that Wang discloses a client/server system for processing information obtained from the a knowledge base. Applicants should duly note that the knowledge base of Wang is stored at the server compute, wherein the information is transmitted from the client computer to the server computer executed by the knowledge base. Moreover, the client computer does not has to a proprietary software embedded therein, it only requires a web browser application to access and utilize all of the information residing in the knowledge base stored in the computer server. Wang, however, discloses the claimed "receiving by the user a rule" by providing a user input through the interface of the web browser, the proposed values of the design, which are used to specify the product design (col.3, lines 7-10); "the rule defining a premise and the and "by determining whether the proposed value or parameters are acceptable based on the knowledge base (col.3, lines 13-15); and "transmitting the rule from the client to a server" as a means for transmitting the data to the server by uploading the specific knowledge base at the server side. Once the specific knowledge base has been uploaded, the data transmission is received at the server side

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computer (col.3, lines 30-50). Wang, on the other hands, does not explicitly generating a function that determines if the a premise is true, in which provides the use of generating the function after the rule was sent to the server in order for the generation to occur. The examiner has introduced Hardy to support the absent limitation of Wang, in Hardy, indeed (col.7, lines 6-58; col.10, lines 12-28) has shown the use of generating a function that determine s if the a premise is true, which was defined by a rule input client into a knowledge base, wherein the knowledge base is stored at the server computer. Hardy has used in the rejection to overcome the deficiencies of Wang. The analysis of the teachings of Wang and Hardy has provided the rejection above. The examiner has cogently explained the reason why Wang and Hardy are being relied upon and so the teachings and suggestions of Wang and Hardy would have suggested to an artisan the language of the claimed invention.

4. Therefore, claims 1-3 are rejected under 35 U.S.C. 103 as being obvious by Wang and Hardy, which describes all of the elements of the claimed invention so as to have placed a person of ordinary skill in the art in possession thereof. In re Spada, 911 F.2d 705, 708, 15 USPQ 1655, 1658 (Fed. Cir. 1990).

For the above reasons, it is believed that the rejection under 35 USC 103 with respect to claims 1-19 should be sustained.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaShonda T. Jacobs whose telephone number is 571-272-4004. The examiner can normally be reached on 8:30 A.M.-5:00 P.M..


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LaShonda T Jacobs
Examiner
Art Unit 2157

ltj
April 28, 2006


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